

Charl. Mus. l. c.). A more careful consideration of this form seems to indicate that its very deeply sinuate sun leaves, the difference in form between the shade and sun leaves and the larger fruit and loose white-oak-like bark are characters which are sufficiently strongly marked and of a constancy to entitle it to specific rank.

✓ *Carya ovalis megacarpa* n. comb. (*C. megacarpa* Sarg. T. & S. 2, 201). An examination of material of *Carya megacarpa* Sarg. from the type locality, Rochester, Monroe County, N. Y., shows that this tree exhibits close affinity to *C. ovalis* (Wang.) Sarg. by having the lower surface of the 5 to 7 leaflets dotted with resinous globules, by having thick, glabrous, red-brown twigs, and short (though larger) ovate and obtuse buds. The only distinguishing characters seem to be in the fruit and buds. The fruit of *C. ovalis* is extremely variable, Dr. Sargent having distinguished four forms, of which the variety *obovatis* approaches *C. megacarpa*. The buds also vary, becoming smaller and inseparable from those of *C. ovalis*, and in a form from the coastal plain of Georgia, a specimen of which has been examined by Dr. Sargent and referred to *C. megacarpa*, both buds and twigs are as slender as in *C. porcina* (Mx.) Nutt.

REVIEWS

Ward & Whipple's Fresh-Water Biology*

This monumental work, to which Professor Ward in particular has devoted many years of investigation as well as editorial supervision over the writings of the other 25 collaborators, is the first attempt of its kind to cover North American fresh-water life in its entirety.

With few exceptions, the various groups of organisms found in fresh waters are treated quite exhaustively, both in their systematic relations as well as in the general details of their anatomy, life history, and biological relations. For the most part, each genus of the various groups is illustrated; while ingenious keys

* Henry Baldwin Ward and George Chandler Whipple, *Fresh Water Biology*. Pp. ix + 1111. 1,547 figures. New York, John Wiley & Sons, 1918. Price \$6.00.

readily carry the reader, in some places even to species, in others only to genera.

In the discussion of the fishes and other aquatic vertebrates by Professor Eigenmann, as well as in the chapter on bacteria in fresh waters by Professor Jordan, it was obviously impossible within the limited space to treat of these organisms except in the briefest way, along general biological lines.

One hundred and ten of the pages are utilized in the strictly botanical portion of the book, the larger aquatic vegetation being treated of from a physical-chemical viewpoint by the late Professor Pond; the green algae by Professor Julia Warner Snow, and the blue-greens by the reviewer. One thousand pages of treatment of animal forms should also prove of utmost interest and importance to all students of the organisms occurring in waters, including the technical water engineer as well as the botanist and zoölogist seeking further information about aquatic life. The distinguished list of specialists who collaborate in the handling of the more zoölogical aspects of the subject insure a most adequate and interesting treatment of their portions of the book. Professors Ward and Whipple deserve the thanks of all biologists for their part in the making of this most stimulating and timely book.

E. W. OLIVE

PROCEEDINGS OF THE CLUB

JANUARY 8, 1918

The annual meeting was held at the American Museum of Natural History. President Richards called the meeting to order at 8:15 P.M. There were fourteen persons present.

The minutes of the meetings held November 28 and December 11 were approved.

The following persons were nominated for membership: Dr. John Ernest Weaver, University of Nebraska, Lincoln, Nebraska; Prof. E. T. Harper, Geneseo, Ill.; Mr. Rudolph Konnerth, College of Pharmacy, New York City; Dr. J. J. Davis, University of Wisconsin, Madison, Wis.

Mr. Percy Wilson, chairman of the Field Committee, reported